

# Bruce Ennis

LEAN SIX SIGMA MASTER BLACK BELT AND MEE  
PROCESS IMPROVEMENT GURU



Bruce is a Quality Management Professional with thirty years experience in the field of Quality, Process Improvement, and Lean. he's been recognized for his accomplishments in Lean by being invited to present at the American Society for Quality's (ASQ) Global Lean Summit and has published a white paper through the ASQ as well.

Bruce is a certified Lean Six Sigma Master Black Belt and Senior Member of the American Society of Quality. He has created Lean programs that have dramatically improved the speed, quality, and profitability of numerous businesses from a wide variety of sectors—aeronautics, manufacturing, petroleum, administration... and even professional sports management.

Bruce has consulted for multi-million dollar conglomerates down to small family owned businesses and is passionate about supporting local manufacturers in process improvement.



manufacturing  
Safety Alliance of BC



**Manufacturing  
& Export  
Enhancement  
Cluster**

## **Part II:**

# **Launching a**

# **Successful 5S Program**



manufacturing  
Safety Alliance of BC



**Manufacturing  
& Export  
Enhancement  
Cluster**

# Part I:

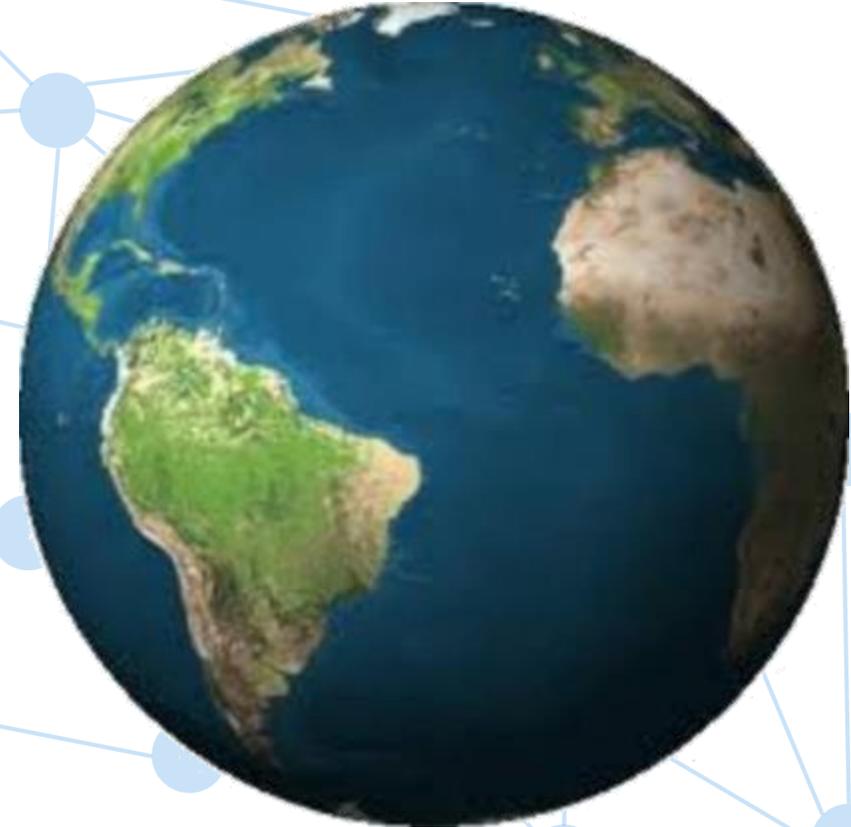
# Why 5S Matters

June 13, 2023 – Webinar

Oct 13, 2023 – New Westminster

# What is 5S?

- Cleaning and Organizing program
- Started at Toyota
- Practiced worldwide



# When You See 5S – You Know It

Sign Cart

Sign Cart

# When You See 5S – You Know It

STEP LADDER

PORTABLE STAIRS

ALUMINUM  
PREPARATION

ALUMINUM  
STORAGE

ROLLING  
ROOM

STREET NAME  
ROLLING

Connect the DOT:  
• Do What's Right  
• Our People Matter  
• Trust Through Teamwork  
• Striving for Excellence  
...the ATS Core Values

Clean

ADJUSTABLE PLIERS



PRY BAR



3/16

5/16



1/4

7/32

3/16



5/32

9/32

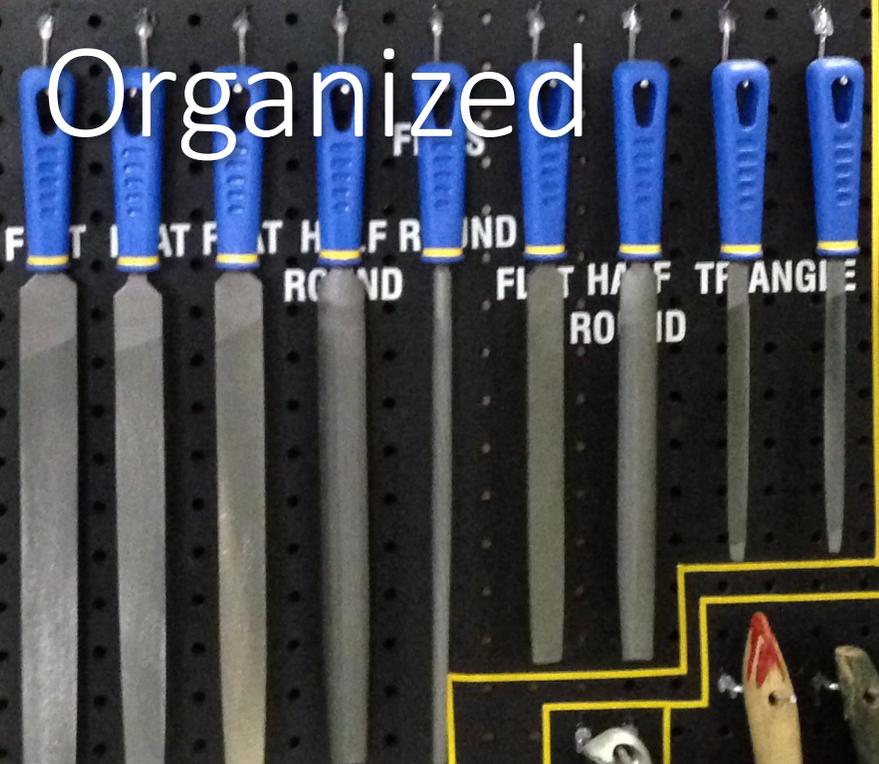
1/2

7/16

3/32



# Organized



FLAT

FLAT

FLAT

HALF ROUND

ROUND

FLAT HALF ROUND

TRIANGLE



HAND SAW



↑ STOPPERS ↑

Nothing is a Struggle

↑ SET PINS/BOLTS ↑

↑ 7/16 ↑

↑ 3/8 ↑

↑ 5/16 ↑

↑ 1/4 ↑

↑ 3/16 ↑

↑ 7/32 ↑

↑ 1/8 ↑



Businesses are Safer

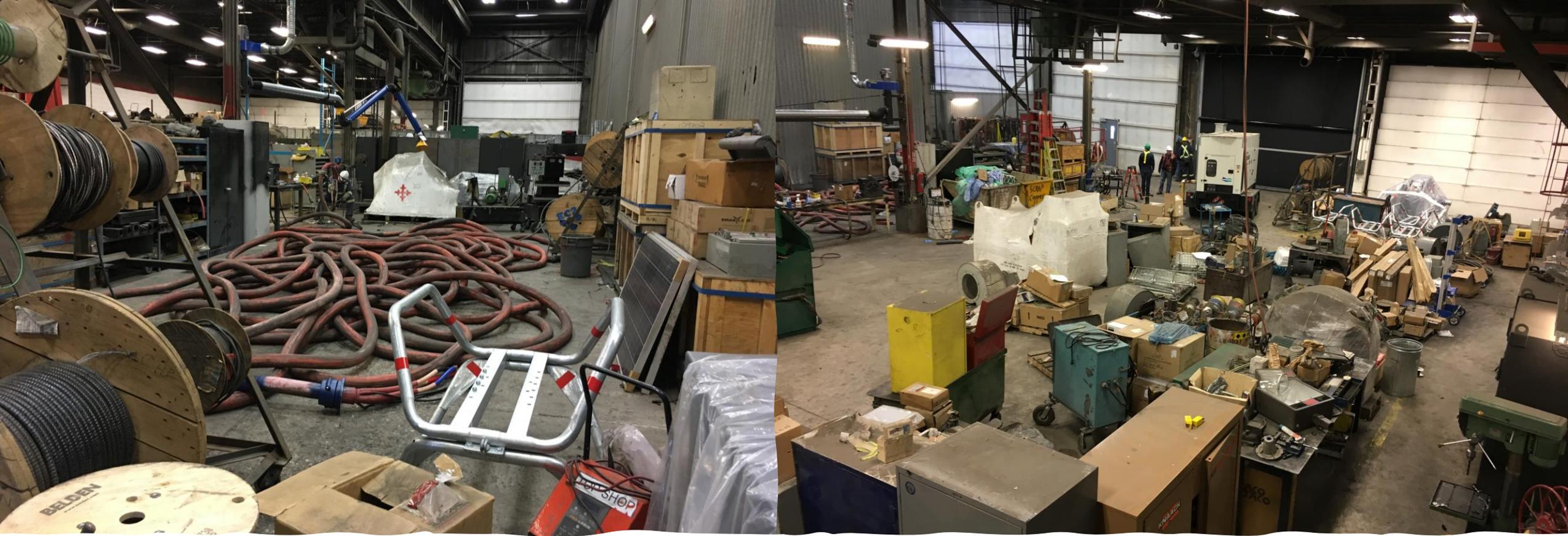
How?



# Slips & Trips

---





# Congestion

---



Mental Health Improves

- ✓ less struggle
- ✓ less clutter
- ✓ every task is easier
- ✓ less stress
- ✓ happier workers
- ✓ higher morale



# Five Reasons for Implementing 5S

1. First impressions matter
2. Improves productivity 25-50%
3. Improves mental health
4. Reduces fatigue
5. Improves **safety**





manufacturing  
Safety Alliance of BC



**Manufacturing  
& Export  
Enhancement  
Cluster**

## **Part II:**

# **Launching a**

# **Successful 5S Program**

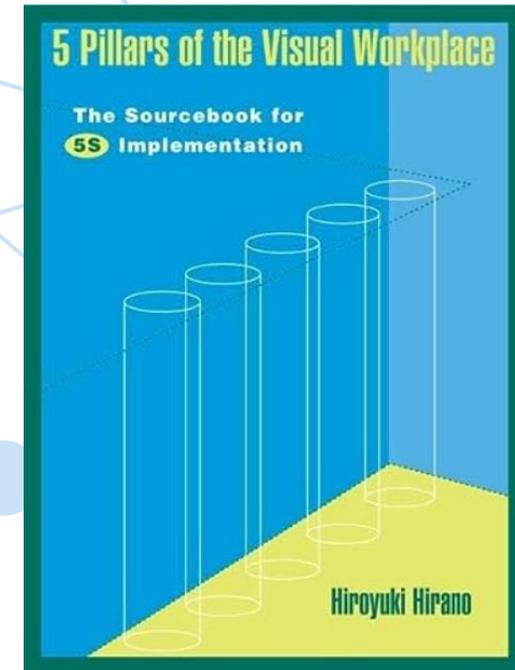
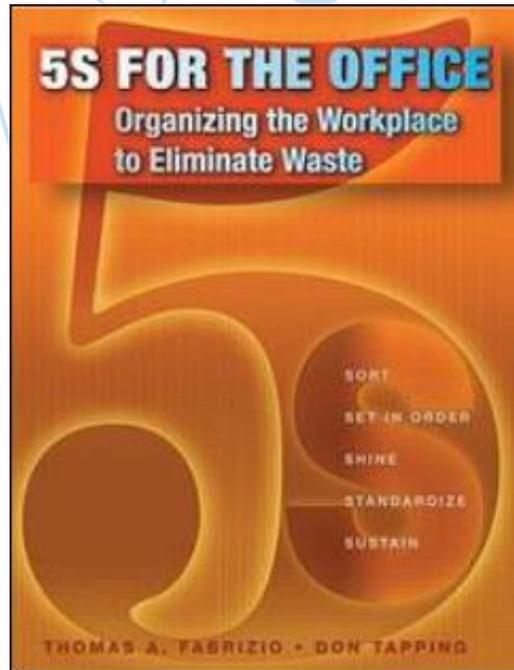
# Good News

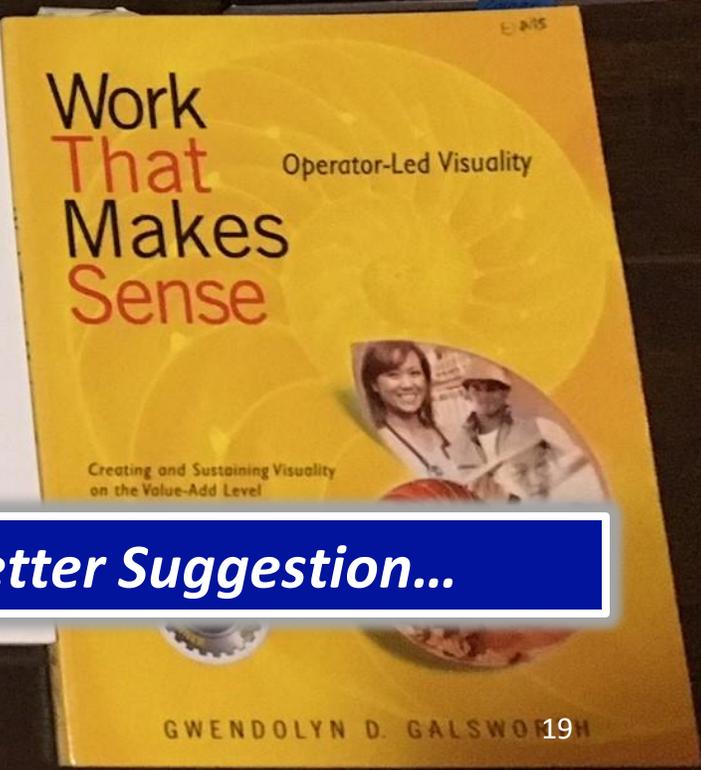
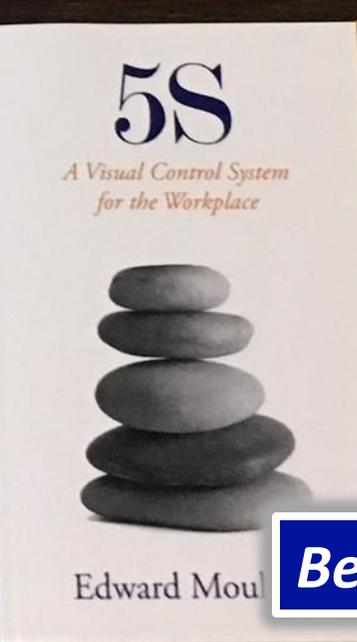
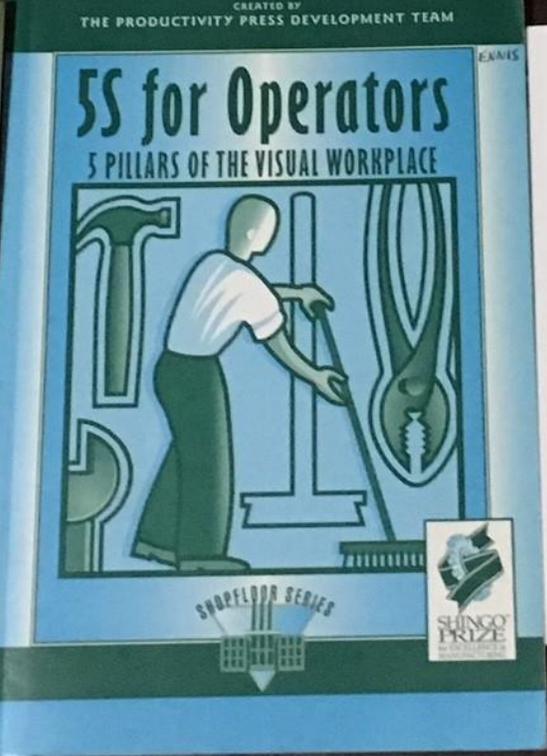
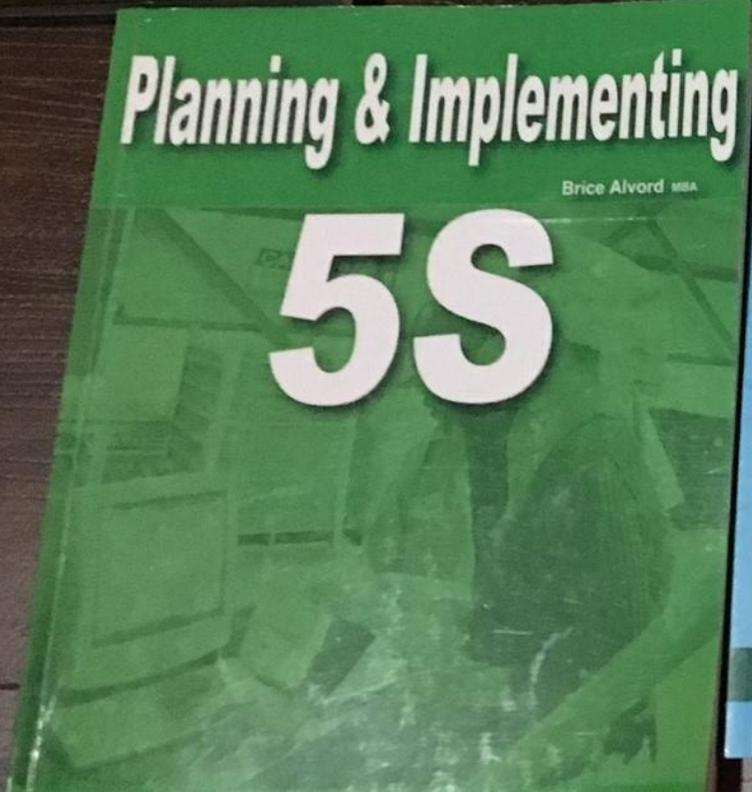
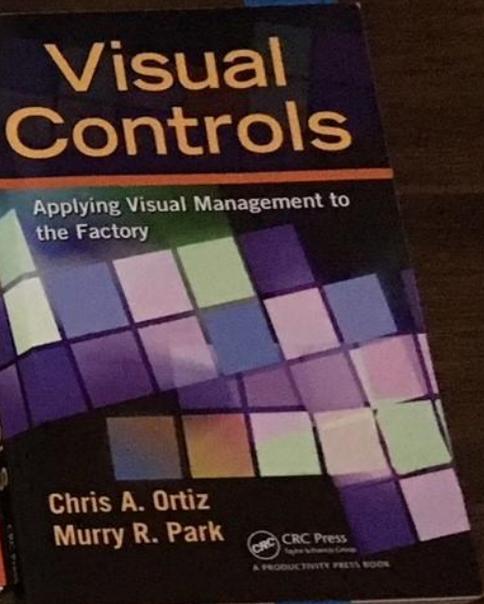
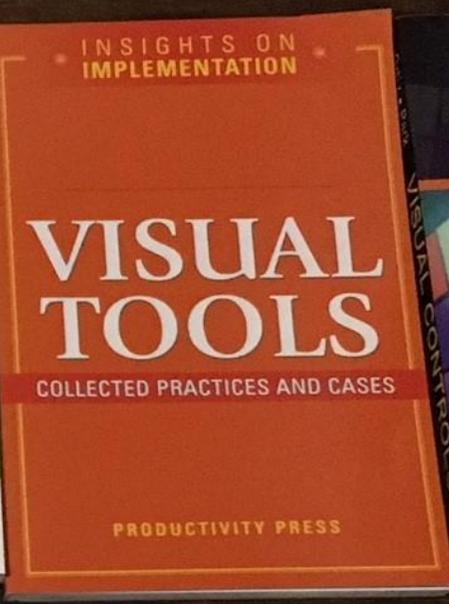
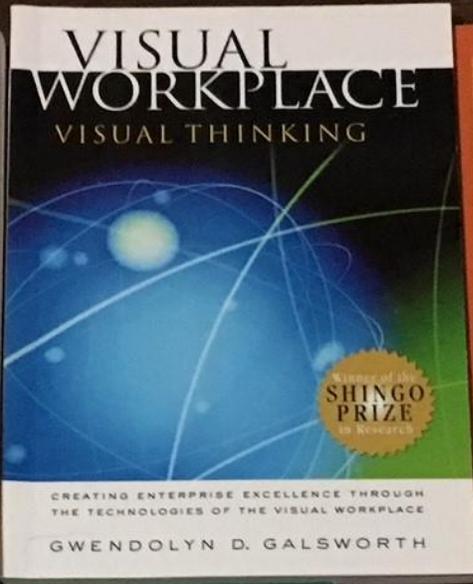
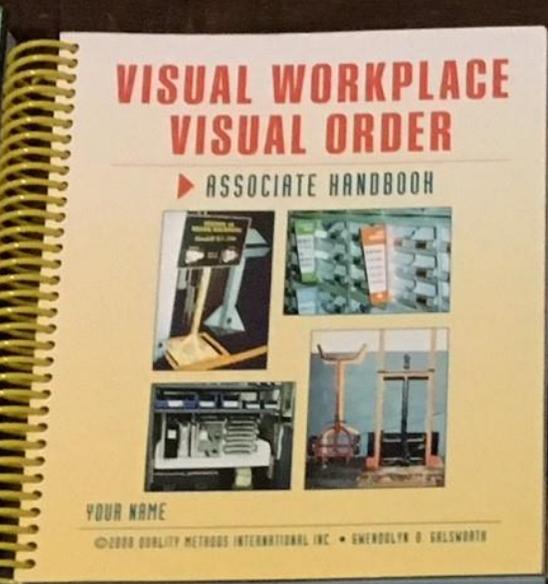
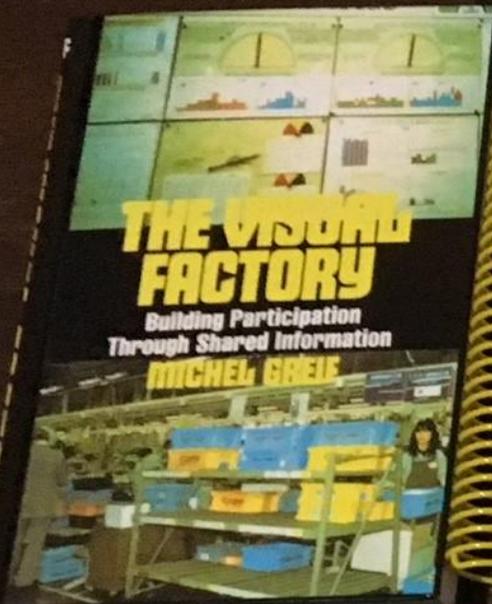
- It doesn't have to cost a lot
- It shouldn't cost a lot
- It can cost a lot



# One Suggestion

- Read a few books





**Better Suggestion...**

# 5S Training the **MEE Cluster Way**



- Simple
- Fast
- Inexpensive
- It works



**Manufacturing  
& Export  
Enhancement  
Cluster**

*More about this at the end  
of this slide presentation...*

# Steps For Starting a 5S Program

---



# 1. Management Support

- Don't start if management isn't "all in"
- 5S everyday
- No exceptions



## 2. Train All Employees

- Train the entire site
- 100% participation.



### 3. Form Your 5S Team



# One Person From Each Area

- Office
- Receiving
- Machining
- Welding
- Assembly
- Maintenance
- Paint Area
- Etc...



# Team members should be naturally:

- Clean
- Orderly





4. Complete a  
“Red Tag” Event



Red Tag = Get Rid of Junk

✓ Cabinets

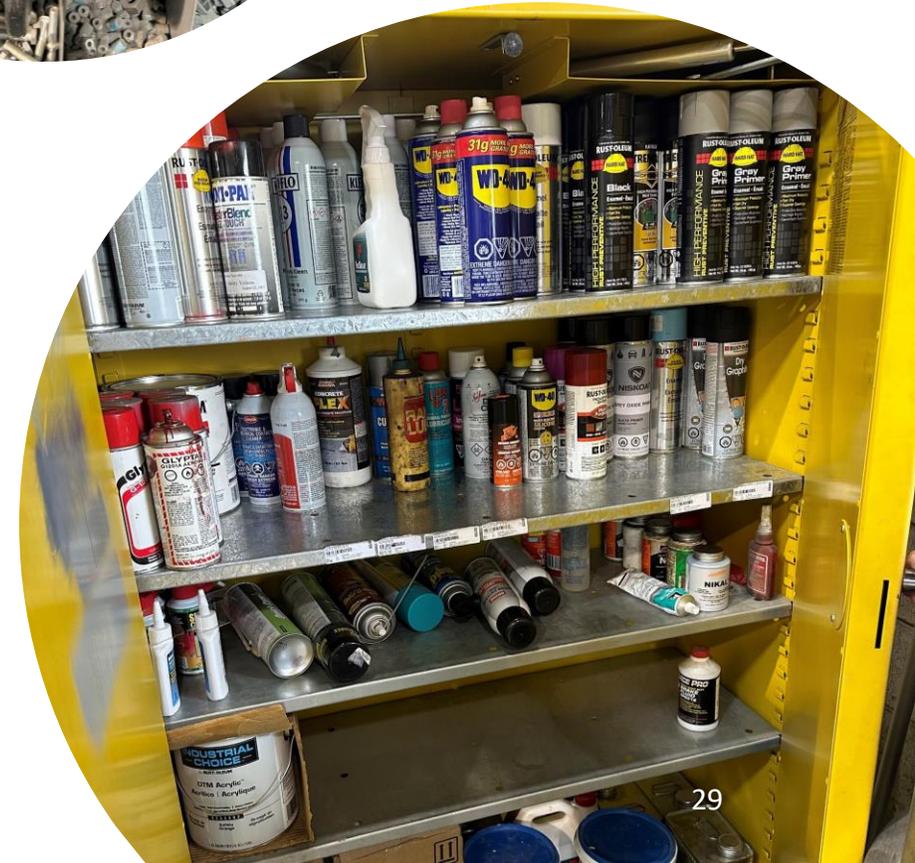
✓ Drawers

✓ Paint storage

✓ Racks & Shelves

✓ Office area

✓ Everywhere!



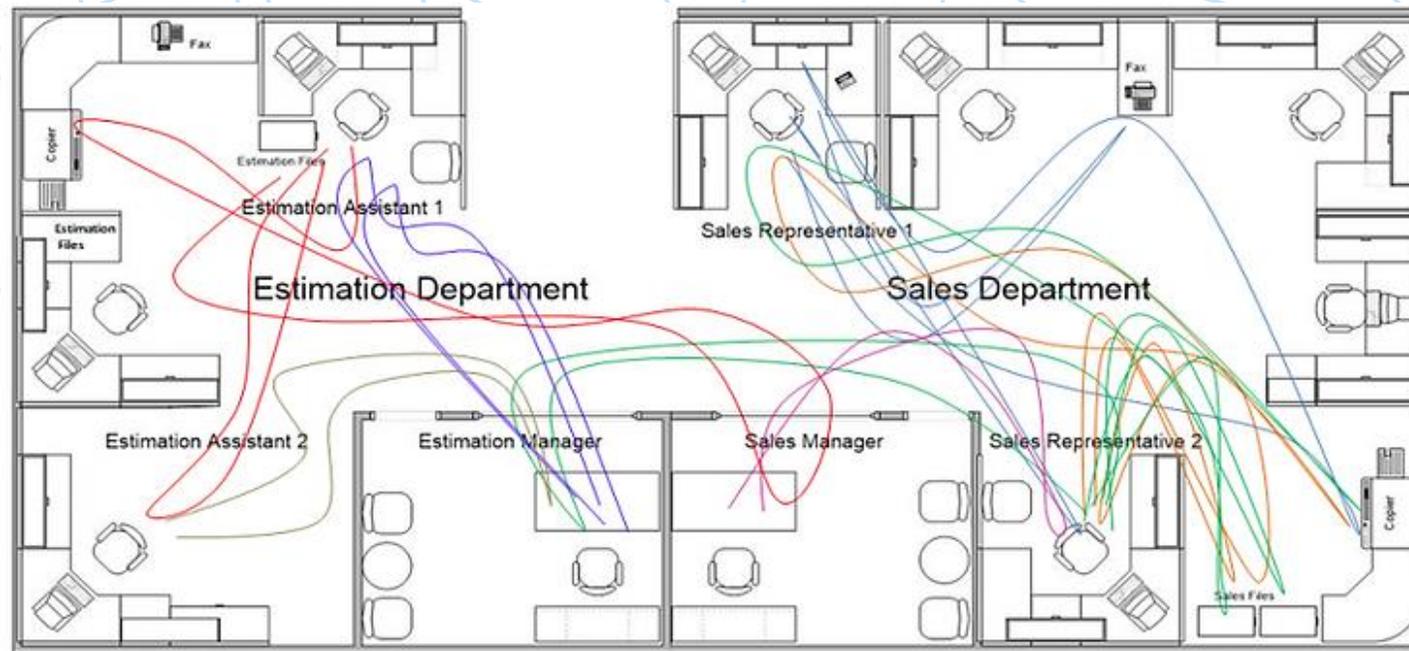
# 5. Redesign the Work Areas

- Eliminate wasted movement
- Root Causes?
  - No power outlet
  - Shared equipment
  - No Lean training

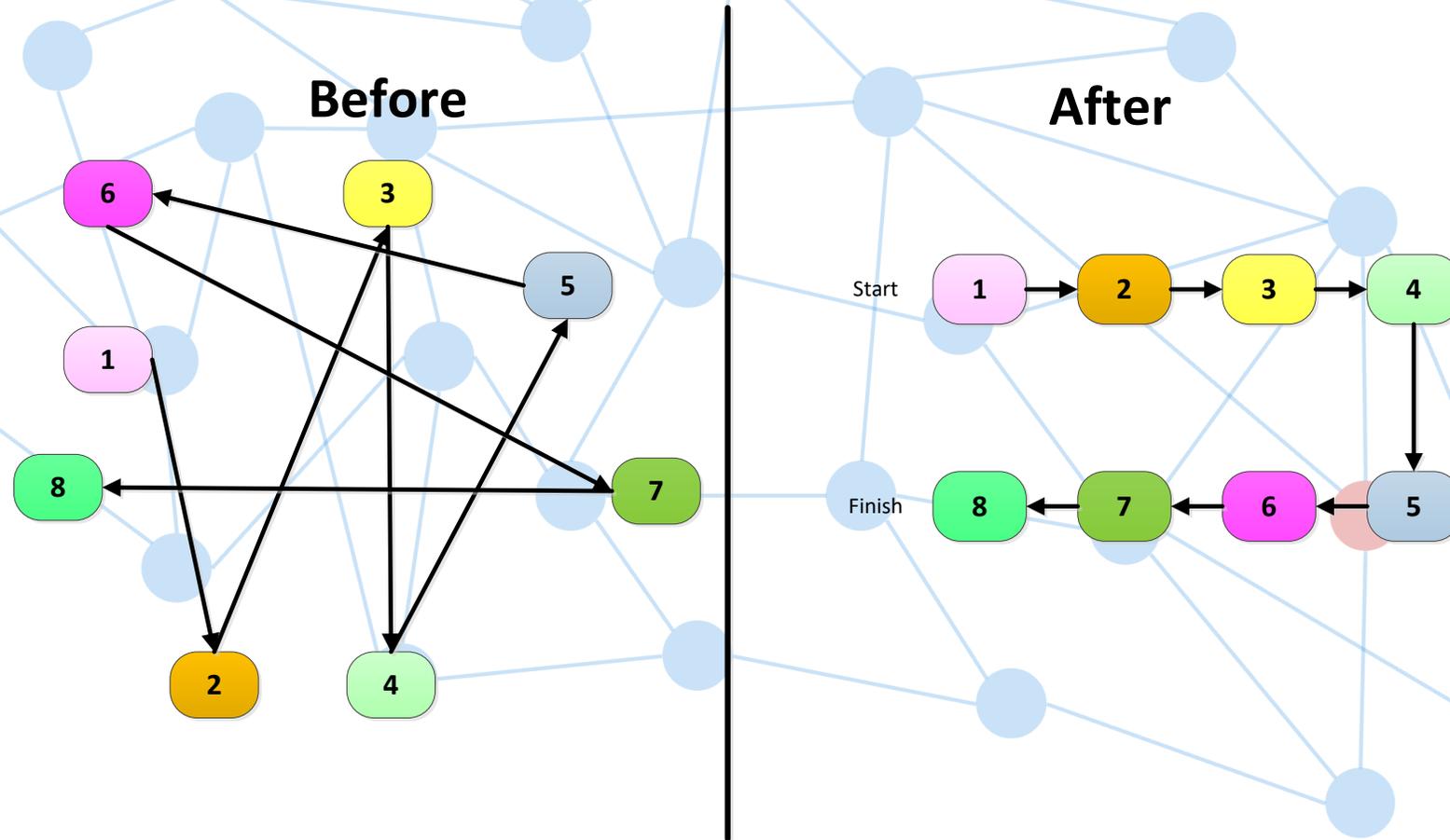


# Motion & Transportation Waste

- Spaghetti Map

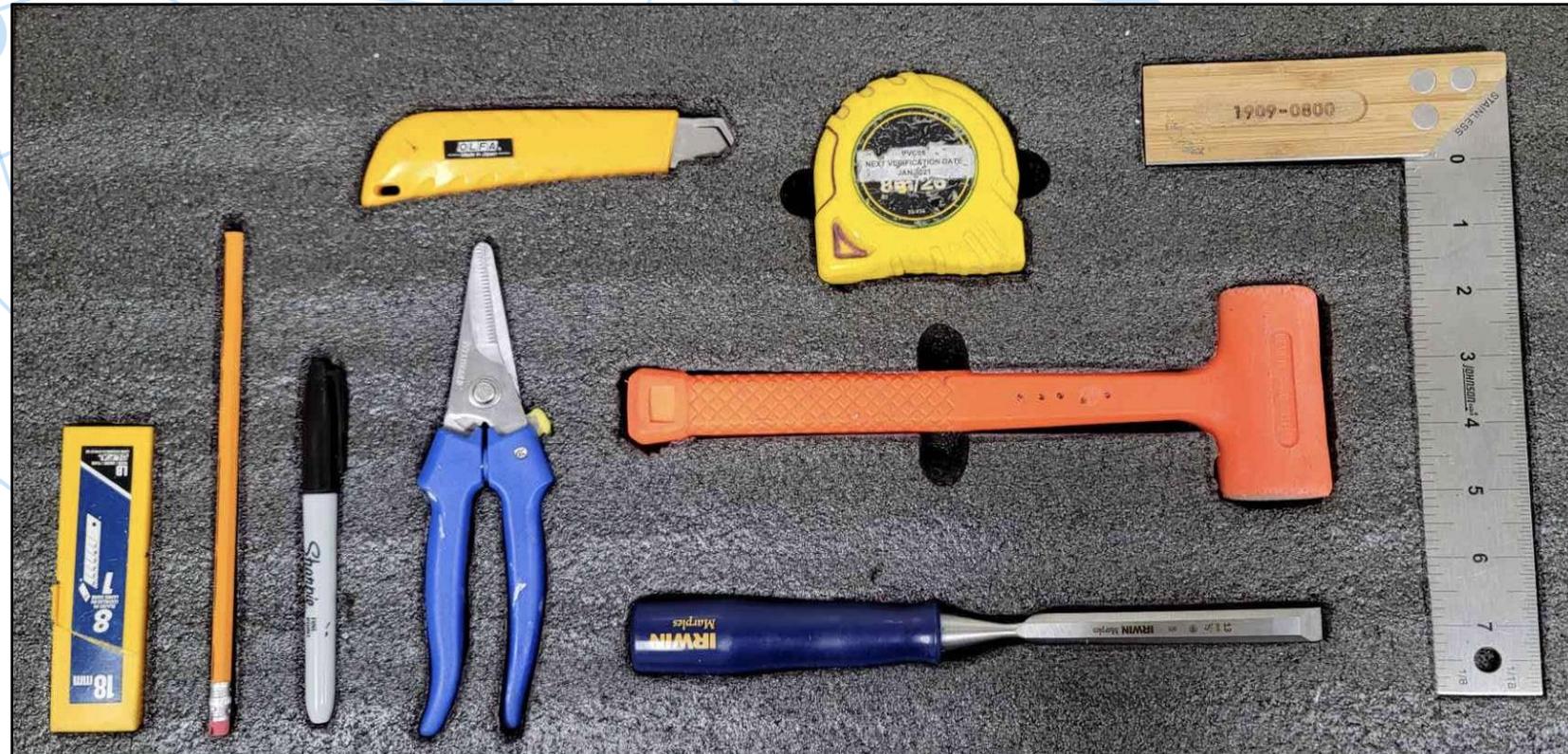


# Motion & Transportation Waste



## 6. Create “Homes” for Everything

- Tools



# Kaizen Foam

---



# Create “Homes” for Everything

---

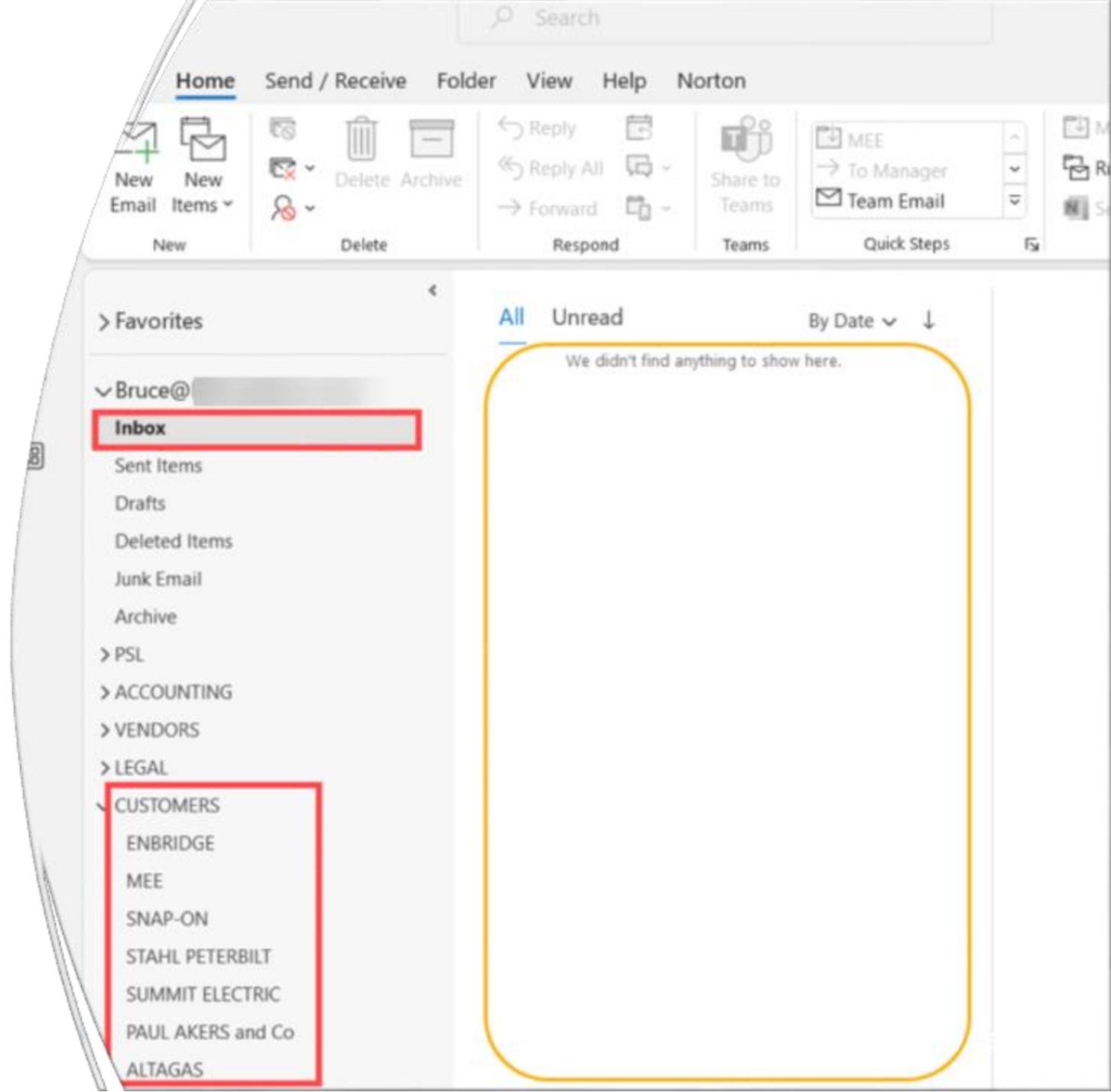


—

# Create “Homes” for Everything



# Create “Homes” for Everything



# Tape the Floors



# Floor Tape

- Much better than paint
- Quality Matters!
- Expensive – but worth it

# 7. Create Cleaning Checklists

• Checklists drive:

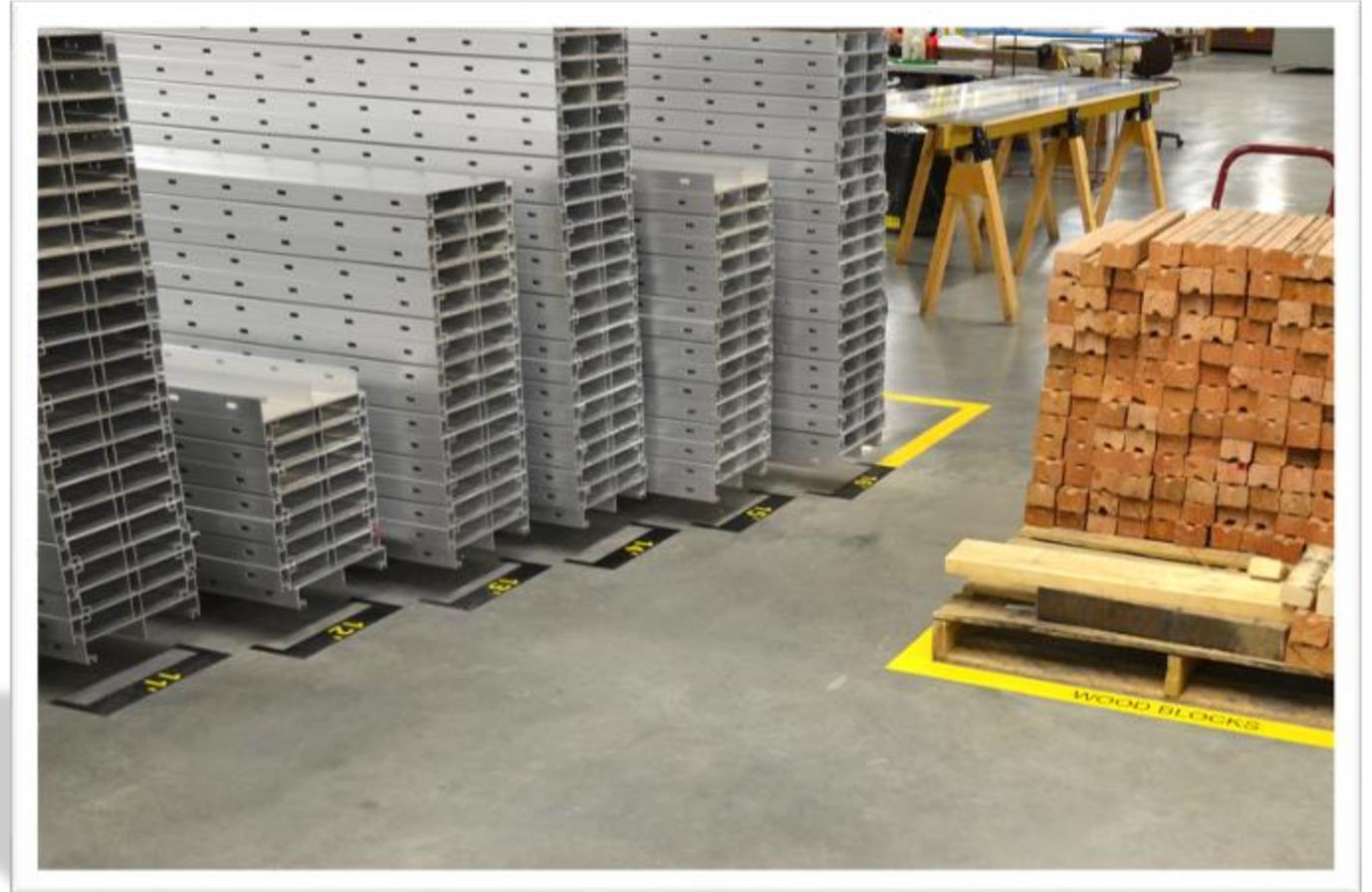
✓ Accountability

✓ Consistency

5S DAILY CLEANING CHECKLIST				1X / day	1X / week	1X / mo.			
5S LEADER - DAY	Sarah	5S TEAM - DAY	BE, TH, BW, TW, JV, BM, VG, IM						
5S LEADER - NIGHT	Kerry	5S TEAM - NIGHT	SL, DE, WP, SH, TS, GS, LS						
<b>Week of May 8, 2023</b>									
Install Area	Description	When	Mon	Tue	Wed	Thu	Fri	Sat	Sun
Jigs - all jigs returned to their home		AM	AM						
		PM	PM						
Tools - all tools returned to tool box		AM	AM						
		PM	PM						
Air hose - wound up		AM	AM						
		PM	PM						
Table - cleared of all mullions, debris		AM	AM						
		PM	PM						

## 8. Begin Cleaning Every Day

- No exceptions  
– EVER
- A condition of employment



# 9. Institutionalize

---

Institutionalize

Institutionalize

**Institutionalize**

...Part of your company's DNA



# 5S Training the **MEE Cluster Way**



**Manufacturing  
& Export  
Enhancement  
Cluster**

# 5S Training

- 1 day class
- Everything on a flash drive



Floor Marking Guide		
Yellow		Aisle ways, traffic lanes and work cells
White		Equipment and fixtures not otherwise color coded (workstations, carts, floor stand displays, racks, etc.)
Blue, Green and/or Black		Materials and components, including raw materials, work-in-progress and finished goods
Orange		Materials or products held for inspection
Red		Defects, scrap, rework and red tag areas
Photoluminescent		Steps and perimeter demarcation to identify egress routes in a lights-out emergency
Red and White		Areas to be kept clear for safety/compliance reasons (areas in front of electrical panels, firefighting equipment and safety equipment, such as eyewash stations, safety showers and first aid stations)
Black and White		Areas to be kept clear for operational purposes (not related to safety and compliance)
Black and Yellow		Areas that may expose employees to special physical or health hazards

crew bin - all screw bins		AM	AM						
		+							

# 5S Training – From Someone Who's Done It



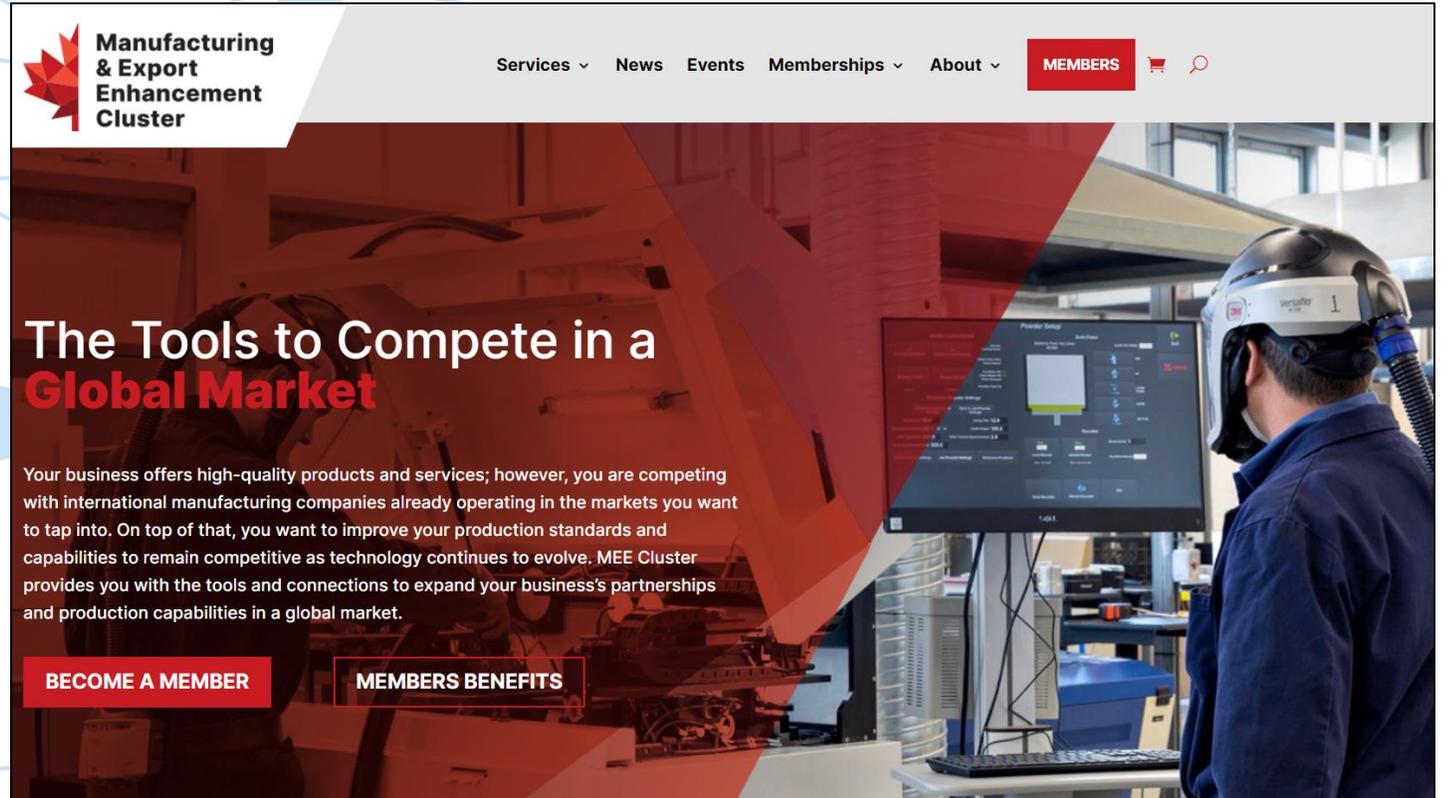
# MEE Cluster

[www.MEECluster.ca](http://www.MEECluster.ca)

Phone: 403.701.8053

E-mail:

David.Rist@meecluster.ca



Manufacturing & Export Enhancement Cluster

Services ▾ News Events Memberships ▾ About ▾ MEMBERS

## The Tools to Compete in a Global Market

Your business offers high-quality products and services; however, you are competing with international manufacturing companies already operating in the markets you want to tap into. On top of that, you want to improve your production standards and capabilities to remain competitive as technology continues to evolve. MEE Cluster provides you with the tools and connections to expand your business's partnerships and production capabilities in a global market.

BECOME A MEMBER MEMBERS BENEFITS

Thank You!

